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PUBLIC UTILITY COMMISSION

DEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF HAWAII

Program Surcharge.	
the Renewable Energy Infrastructure	·)
Big Wind Implementation Studies through)
For Approval to Recover Deferred Costs for	·)
HAWAIIAN ELECTRIC COMPANY, INC.	DOCKET NO. 2011-0112
In the Matter of the Application of)

DIVISION OF CONSUMER ADVOCACY'S STATEMENT OF POSITION

Pursuant to the Hawaii Public Utilities Commission's ("Commission") Rules of Practice and Procedure, Hawaii Administrative Rules ("HAR") § 6-61-62, the Division of Consumer Advocacy ("Consumer Advocate") hereby informs the Commission that it does not object to the cost recovery of \$3.9 million, associated with the Stage 1 Big Wind Implementation Studies, through a surcharge, but with certain qualifications. The following offers the Consumer Advocate's analysis of the issues in this proceeding, the basis for the Consumer Advocate's position, as well as the recommended qualifications.

I. BACKGROUND.

A. PROCEDURAL HISTORY.

On May 17, 2011, Hawaiian Electric Company, Inc. ("HECO" or the "Company") filed its application requesting approval to recover its costs for outside contractor services totaling \$3,912,952 for Stage 1 of the Big Wind Implementation Studies (the "Stage 1 Studies"), for which cost deferral was previously authorized by the Commission in its Decision and Order filed on December 11, 2009 in Docket No. 2009-0162 ("2009-0162 Decision and Order"). HECO is requesting recovery of these costs be provided through the Renewable Energy Infrastructure Program Surcharge ("REIS"). ¹

On June 6, 2011, the Consumer Advocate filed its preliminary statement of position.

On June 1, 2011 and June 6, 2011, respectively, Life of the Land ("LOL") and the County of Maui ("County") timely filed a Motion to Intervene in the instant proceeding. HECO filed a Memorandum in Opposition contesting the intervention of both the LOL and County intervention into the instant proceeding on June 8, 2011 and June 15, 2011, respectively.

The REIS was first proposed in Docket No. 2007-0008. The concept of this surcharge was further developed and authorized as part of Docket No. 2007-0416 in Decision and Order, filed on December 30, 2009. The need for further clarification and how the surcharge might be used as it relates to projects with developers or Independent Power Producers ("IPP") is also the subject of Docket No. 2010-0139, which is still open. As the concept of the surcharge was being developed, it was also referenced as the Clean Energy Infrastructure Surcharge or the CEIS. The Consumer Advocate will generally refer to the surcharge as REIS, but reference to either REIS or CEIS should be considered to be synonymous in this document.

On July 6, 2011, the Commission granted both motions to intervene by LOL and the County in the instant proceeding.²

On August 31, 2011, the Commission issued its Order Approving Proposed Stipulated Procedural Order, As Modified.

On September 12, 2011, the Commission issued its Order Amending Order Approving Proposed Stipulated Procedural Order As Modified, Filed on August 31, 2011.

On October 6, 2011, the County issued information requests to HECO.

On October 7, 2011, LOL and the Consumer Advocate issued information requests to HECO. HECO responded to the information requests on October 28, 2011.

On October 12, 2011, the Commission issued its Order Approving Joint Motion for Protective Order As Amended.

On November 29, 2011, the Commission issued its Order Denying Life of the Land's Motion for Leave to File Motion for Release of Confidential Information.

On December 1, 2011, the Consumer Advocate filed a letter with the Commission, requesting an extension to file direct testimonies or statements of positions by its office, LOL and the County, from December 2, 2011 to December 9, 2011, with a respective extension for the parties of the proceeding to file their information requests, from December 30, 2011 to January 6, 2011.

See Order Granting Life of the Land's Motion to Intervene Filed on June 1, 2011 and County of Maui's Motion to Intervene filed on June 6, 2011, filed on July 6, 2011.

II. DISCUSSION.

As is encompassed in various State of Hawaii policies (e.g., Hawaii Clean Energy Initiative, the New Day) and the purpose of several state laws (e.g., Hawaii Revised Statutes ("HRS") § 269-27.2, HRS § 269-92) one of the main objectives of Hawaii's energy policy is for the state to move away from imported fossil fuels to locally produced renewable energy, which is set forth in the second paragraph of the Energy Agreement Among the State of Hawaii, Division of Consumer Advocacy of the Department of Commerce and Consumer Affairs, and the Hawaiian Electric Companies, signed on October 20, 2008 ("Energy Agreement"), which states that:

On behalf of the people of Hawaii, we believe that the future of Hawaii requires that we move more decisively and irreversibly away from imported fossil fuel for electricity and transportation and towards indigenously produced renewable energy and an ethic of energy efficiency. The very future of our land, our economy and our quality of life is at risk if we do not make this move and we do so for the future of Hawaii and of the generations to come.

As recognized by the Consumer Advocate in Docket No. 2009-0162, it is with:

. . . this intent that gave rise to the commitment of the signatories to the Energy Agreement to investigate the possibility of wind power providing a significant contribution to Oahu's RPS [(Renewable Portfolio Standards)] requirements.

As set forth in various section of the Energy Agreement, HECO has made significant commitments regarding "Big Wind," which is defined on page 4, paragraph 1 of the Energy Agreement, As discussed in that section,

Hawaiian Electric commits to integrate, with the assistance of the State to accelerate the commitment, up to 400 MW of wind power into the Oahu electrical system that is produced by one or more wind farms located on either the island of Lanai or Molokai and transmitted to Oahu via undersea cable systems (the "Big Wind" projects). This accelerated process shall in no way limit the longer term incorporation of additional neighbor island renewable energy projects should

those future projects and cost of integration prove feasible and prudent to ratepayers.³

In its 2009-0162 Decision and Order, the Commission approved HECO's application filed on July 17, 2009 in Docket No. 2009-0162 ("2009-0162 Application"), which allowed the Company to defer costs for the Big Wind Implementation Studies for later review for prudence and reasonableness. The Commission particularly stated that:

... [it] will not authorize a specific amount of costs to be recovered from ratepayers until a detailed review is conducted at a later date on the actual incurred costs. As such, the commission will also refrain from making any decision as to the specific cost recovery mechanism or the terms of any recovery mechanism (e.g., amortization period or carrying treatment).

The Commission also agreed with the Consumer Advocate's recommendation that a prudence review be required that would encompass the issue of whether HECO "aggressively administered and managed" costs and that documentation would be required by HECO to satisfy its burden.

Lastly, the Commission noted its concern that the Big Wind Implementation Studies were undertaken without prior commission review (contrary to the mechanism proposed by HECO for the REIP Surcharge). As a result, the Commission stated that:

In its subsequent prudence review, HECO should provide the commission with comparable evaluation of other options to that which it conducts for Big Wind, be it through the Studies or other means. Such alternatives could include residential PV [(photovoltaic)], large-scale PV, biomass, biofuel and concentrated solar options. Alternatives could also include renewable energy project proposals that HECO rejected in the past two years due to completion dates and transmission concerns. In addition, as part of any prudence review, the commission expects that the Studies would enable the commission to answer the following questions: 1) What is the total cost of Big Wind (including the costs of the undersea cable, Oahu transmission and distribution upgrades, purchased power, and changes in the generation fleet to support Big Wind); 2) Are there viable alternatives to Big Wind for meeting the State's Renewable Portfolio

The Consumer Advocate's statement of position, filed on November 13, 2009, in Docket No. 2009-0162, at 5 and 6.

Standards, HRS § 269-92; and 3) What are the costs of all alternatives to Big Wind (including any projects that arose through competitive bidding, grandfathered projects, recently declined PPA requests, concentrated solar, distributed solar PV, large-scale solar PV, biofuel and biomass projects).

Based on the above, the issues set forth in the Stipulated Procedural Order for the instant proceeding are as follows:

- 1. Did Hawaiian Electric prudently and reasonably incur the Stage I Studies deferred costs?
- 2. To the extent that it was prudent and reasonable for Hawaiian Electric to incur the deferred costs for the Stage 1 Studies, what specific cost recovery mechanism should be used to recover those costs?
- What is the total estimated cost of "Big Wind" (i.e., up to 400 megawatts of nonfirm, variable renewable wind generation power from Molokai and/or Lanai into the Oahu grid, including the costs of the undersea cable, Oahu transmission and distribution upgrades, purchased power, changes in the generation fleet to support Big Wind, and related community benefits)?
- 4. Is Big Wind, in comparison with other incremental alternatives (i.e., beyond approved alternatives including residential PV, large-scale PV, biomass, biofueled generation, concentrated solar, Oahu wind generation, and/or ocean thermal energy conversion), a reasonable and cost-competitive renewable energy resource component to meeting the State's RPS goals?

It should be made clear that the following discussion focuses on the primary issues in this proceeding, that is, the reasonableness of allowing cost recovery of the Stage 1 Studies and, if approved, the appropriate means to effecting that recovery. While the Consumer Advocate acknowledges the interrelationship between the studies and the proposed Big Wind project, the Consumer Advocate contends that the issues surrounding the recoverability of the studies' costs can be examined without determining all of the issues related to the Big Wind projects.

A. DID HECO PRUDENTLY AND REASONABLY INCUR THE STAGE 1 STUDIES DEFERRED COST?

In order to address the issue regarding whether HECO prudently and reasonably incurred Stage 1 Studies deferred costs ("Studies' costs"), the Consumer Advocate contends that certain questions should be addressed. Those questions are:

- Was there a need for the Stage 1 Studies?
- Did HECO use or rely upon reasonable means to conduct the Stage 1
 Studies?
 - Did HECO exert reasonable efforts to prudently and reasonably manage the Stage 1 Studies and the associated Studies' costs?

1. There Was a Need for the Stage 1 Studies.

The issue regarding need for the Stage 1 Studies was also discussed in the Consumer Advocate's Statement of Position, filed on November 13, 2009, in Docket No. 2009-0162. The Consumer Advocate's position in that proceeding (and continues to be the Consumer Advocate's position in this proceeding as well) was that there was a

need for the Stage 1 Studies in order to conduct the analysis to determine whether the concept of interconnecting Oahu with Molokai and Lanai was even feasible. Without such studies, expending resources towards that goal would not be prudent. Further, even if the Big Wind projects are never completed, the finding so of the Stage 1 Studies appear to have other potential use as it relates to other renewable projects. The discussion regarding the need for the Stage 1 Studies in Docket No. 2009-0162 will not be repeated in its entirety, but is incorporated in this Statement of Position by reference.

It should be made clear, however, that the Consumer Advocate believes that there are still a number of questions regarding the Big Wind Projects. One of the underlying issues is whether other alternatives might not only be more cost-effective on a theoretical basis, but also represent a more realizable project. The Consumer Advocate is keenly aware of the various public concerns with the proposed projects. Given these public concerns, even if the proposed projects were the most cost-effective proposals on the table, the likely delays in the projects to address those public concerns might lead to additional costs in various forms. Those additional costs could include the following:

- Higher than projected AFUDC due to delays related to public concerns;
- Higher than anticipated community benefits costs to assuage public concerns;
- Higher than anticipated study and/or survey costs in order to address public concerns; and
- Higher than anticipated legal costs incurred to address public concerns and opposition in various forums.

The above list is not meant to be comprehensive, but reflects examples of very likely costs to be incurred due to the sensitivity associated with the proposed projects. These additional costs could affect the finding of relative cost-effectiveness, where the actual costs that will be incurred may be significantly greater than was originally estimated. Thus, while the original estimated costs associated with the Big Wind projects might have appeared to be a cost-effective alternative compared to other renewable energy projects, the end result may be vary significantly due to additional costs that will be incurred.

While the Consumer Advocate acknowledges that the relief requested in this proceeding relate to the Stage 1 Studies and not the actual wind farms or cable costs, one might argue that the studies themselves could have been deferred until various other issues associated with the concept were first addressed in order to not only properly assess and address community concerns but also to reduce the possible costs that may be likely. On a going-forward basis, there should be a better demonstration of the evaluation of various alternatives to ensure that the renewable projects are not only the most cost-effective but also represents those projects most likely to be placed in service efficiently and on a timely basis. The Consumer Advocate is aware of the assertions that have been made regarding the need to consider all projects and that the Big Wind projects are only part of the renewable generation solution that will be necessary to enable Hawaii to meet its clean energy goals and that the combined costs of the Big Wind projects (including the undersea cable) are still competitive. Such assertions should have been part of an Integrated Resources Planning ("IRP") process, where the support for such assertions could have been compared against all other

reasonable alternatives. The Consumer Advocate encourages the Commission to re-initiate the IRP processes to allow a more in-depth analysis of various alternatives in a more orderly and open fashion. Through the IRP process, there will hopefully be more assurances that can be obtained regarding the possibility of other additional renewable resources, such as Big Solar, or any other potentially contentious project, which might lead to increased AFUDC or other costs for these projects. ⁴

Thus, while the Consumer Advocate contends that the Commission can find that there was a need for the Stage 1 Studies, the Consumer Advocate also supports the notion that there be more analysis to support a finding that the most overall cost-effective solutions (and not just on a theoretical basis) are being pursued at this time, with less cost-effective solutions to be considered at a later time.

2. It Appears that HECO's Efforts to Initiate the Studies were Reasonable.

The Commission's 2009-0162 Decision and Order makes clear the expectation that, prior to seeking recovery of any costs through the REIS, HECO should first seek Commission approval of its intent and the expected costs. Even though Commission approval was not given prior to HECO incurring these costs, assuming that the Commission deems that it was reasonable for HECO to proceed with the Stage 1 Studies since there was a need for them, the next step that should be addressed is whether HECO took reasonable actions in determining how to conduct those studies as

It should be noted that HECO has recently filed an application seeking Commission authority to defer Stage 2 study costs. See Docket No. 2011-0370.

well as the appropriate balance of in-house and outside vendors to accomplish those goals.

The Consumer Advocate notes that HECO's response to CA-IR-4 confirms the discussion in Docket No. 2009-0162, wherein HECO's selection of the consultants for the Stage 1 Studies was not done through a bidding process. Instead,

contracts for consulting services are [generally] obtained based on a qualification-based selection process with firms that have Consultant Services Master Agreements ("CSMAs") in place with [HECO]. Consultants who have CSMAs with [HECO] are familiar with the Hawaiian Electric system and philosophies, have successfully completed past projects, are responsive to Company needs, and/or have unique skill sets that have continuously proven to bring value to the Company.

The Consumer Advocate notes that the studies being conducted are technical in nature and the vendors capable of doing such studies are likely limited. That being said, the Consumer Advocate contends that HECO should still be able to demonstrate that the vendors selected represent a selection that not only can perform the task but also represents the most reasonably priced vendor. HECO should be able to demonstrate that each contract represents the best value of the costs expected to be recovered from the ratepayer. HECO's response to PUC-IR-24 in Docket No. 2009-0162 provides a discussion of the contracts with the Hawaii Natural Energy Institute, General Electric, KEMA, EPS, and CS Squared. These studies represent a majority of the total \$3.9 million incurred.⁵ While HECO's response to CA-IR-24 does not necessarily address every contract and certain questions may still remain, it does

The Consumer Advocate notes that when it was verifying that the costs being sought for recovery from ratepayers only represented costs for outside services (since in-house costs should arguably have already been recovered through base rates), HECO acknowledged an error of \$1,029. HECO had inadvertently included \$1,029 of non-outside services in the total, but removed it, leaving a total of \$3,911,923 instead of the \$3,912,952 set forth in its application. Thus, HECO's requested relief is the recovery of \$3,911,923 instead of the original amount.

provide support for a finding that HECO exercised reasonable efforts in selecting its consultants.

3. HECO Appears to Have Exercised Reasonable Efforts to Manage its Contracts.

In the Statement of Position filed in Docket No. 2009-0162, the Consumer Advocate recommended that the Commission should require HECO to administer the studies as cost effectively as possible and the Commission adopted this recommendation in its 2009-0162 Decision and Order. It appears that this requirement yielded some definite results. As set forth in the 2009-0162 application, HECO's estimated that the total costs for the Stage 1 Studies would be \$6,258,000, where approximately \$4,566,000 would be spent on the Oahu Wind Integration and Transmission Studies and \$1,692,000 would be spent on the Transmission/Cable Routing and Permitting Studies. However, as set forth in the application in the instant proceeding, a comparison of the actual and forecasted costs, presented on page 22 of the application, reflects the various savings (other than on the KEMA and Black & Veatch contracts). HECO's application caused some confusion, however, since the table on page 22 reflects a total savings of about \$2.1 million, but the actual difference between the amounts shown on the table is \$2.3 million. To add further confusion, on page 23, HECO asserts that its diligent efforts to manage costs for the Stage 1 Studies resulted in a \$2.41 million decrease in the forecasted costs. As set forth in the response to CA-IR-5, however, the actual savings was the \$2.3 million and that the \$2.1 million shown on the table was because of estimated costs in hidden cells

that needed to be eliminated and the \$2.41 million was a preliminary savings estimate from an early draft.

The actual savings of \$2.3 million represents an overall decrease of about 37% of the original estimate. The decrease is related to the efforts that are described on pages 23 through 27 of the application. As HECO discusses on those pages, the following steps led to the observed savings:

- Dedicated project management;
- Timely reviews of progress and appropriate actions to act upon the
 assessment, such as reduction in scope where appropriate, redirection of
 studies as appropriate; and developing strategies to create analyses that
 had higher values; and
- Leveraging cost sharing with other entities such as the U.S. Department of Energy, HNEI, and other agencies.

As it relates to the cost sharing with other agencies, HECO indicates that \$3.5 million, obtained from other sources, went to various studies, including the cable route survey (\$1.5 million) and the transmission and system integration conducted by GE (\$0.5 million). These outside sources of funding obviously represent a major component to keeping the incurred costs that HECO seeks to recover from ratepayers lower as the total amount of outside funds almost equals the total costs that are targeted for recovery from ratepayers. As HECO is now seeking to move forward with Stage 2 Studies, if HECO receives approval from the Commission to do so, HECO should definitely seek to

^{6 \$2.345} million / \$6.258 million = .3747 = 37.5%

Application, at 26.

be just as aggressive in ensuring that ratepayers are not asked to pay more than might be necessary. The observed savings resulting from HECO's efforts support a finding that reasonable efforts were made to manage costs and reduce the impact on ratepayers.

- B. TO THE EXTENT THAT IT WAS PRUDENT AND REASONABLE FOR HECO TO INCUR THE DEFERRED COSTS FOR THE STAGE 1 STUDIES, WHAT SPECIFIC COST RECOVERY MECHANISM SHOULD BE USED TO RECOVER THOSE COSTS?
 - 1. The Use of the REIS to Recover the Approved Level of Costs is Reasonable.

As part of the relief sought by HECO, it requests the ability to use the REIS to recover the studies' costs as an alternative to recovering the costs in base rates. As discussed in various other dockets, the use of a surcharge should generally be limited to a certain subset of costs that meet certain criteria since the use of a surcharge represents single-issue ratemaking. The Consumer Advocate will not repeat that discussion here since the Consumer Advocate acknowledges that cost recovery for the studies in question was part of the Energy Agreement. As set forth in section 3 of the Energy Agreement, the parties to the Energy Agreement agreed that the cost of implementation studies would be recoverable through the Renewable Energy Infrastructure Program or Clean Energy Infrastructure Program surcharge. Thus, rather than discuss whether the studies' costs meet the various criteria that normally applies to any type of single-issue ratemaking issue, the Consumer Advocate acknowledges that in the Energy Agreement, as well as in Docket No. 2008-0083, the Consumer Advocate

has already consented to the use of the REIS as an acceptable cost recovery mechanism for HECO to recover the approved level of costs.

The Consumer Advocate also acknowledges, however, that the Commission is not a signatory to the Energy Agreement and is not bound by the commitments in the Energy Agreement. As such, the Commission may decide that recovery of the approved level of costs through a surcharge mechanism is not appropriate. In fact, in Docket No. 2007-0416, the Commission's Decision and Order filed on December 30, 2009 set forth that, while the Commission approved of the concept of the REIS, the Commission indicated that the REIS should not be used for more complex projects or cost recovery effort.⁸

As it relates to the costs associated with the Stage 1 Studies, these costs were recorded by HECO as an expense in its Production Operations and Maintenance account. As such, it can be argued that the project does not "affect numerous aspects of the utility's expenses and earning," and appears consistent with the costs that could be included in the REIS as approved by the Commission. In comparison, the total costs estimated for the Big Wind projects themselves would potentially affect many different areas in the revenue requirement determination that would require greater consideration of the net impact on the Company in order to determine what might be recoverable from ratepayers.

If the Commission does decide that the Stage 1 Studies' costs should not be recovered through the surcharge, the Consumer Advocate has offered in its Statement

Decision and Order, filed in Docket No. 2007-0416, at 23 and 24.

⁹ Decision and Order, filed in Docket No. 2007-0416, at 24.

of Position in Docket No. 2009-0162 that it would not object to recovery of prudently incurred costs through base rates. However, consistent with the Energy Agreement and the settlement in Docket No. 2008-0083, recovery through the REIS is reasonable and would allow the Commission a better opportunity to clearly evaluate the costs being recovered through the surcharge as compared to including some estimate in base rates not necessary subject to a reconciliation process.

2. The Company's Proposed Recovery Period is too Short.

In its application, the Company is requesting that it be able to recover the Commission approved level of costs over a 12 month period. Based on its response to CA-IR-1, HECO's selection of this recovery interval appears arbitrary since the Company's response indicates that its proposed 12-month recovery "was selected as a compromise term between seeking timely recovery for costs that have already been incurred and managing the rate and bill impact on customers."

While the Company contends that its proposed recovery period balances the incurred costs and bill impact, the proposed recovery period actually represents a fairly short period of time as compared to the project(s) that the studies support. Given that the studies were conducted for the purposes of evaluating the feasibility of having large wind farms on neighbor islands delivering energy to Oahu through an undersea cable, it is arguable that the studies should be recovered as part of the projects, when those projects are placed in-service. Furthermore, it is arguable that the appropriate period

See, generally, Application (e.g., page 29).

over which the studies' costs should be recovered should be over the useful life of the projects instead of over a 12-month period.

While the Company has indicated that it does not follow the guidance offered by the National Association of Regulatory Utility Commissioners ("NARUC") Uniform System of Accounts ("USOA") and the associated instructions as it relates to Account 183,¹¹ Preliminary Survey and Investigation Charges, the Consumer Advocate contends that it bears relevance to the Commission's consideration of the Company's request for recovery over 12 months. The description of Account 183 is as follows:

A. This account shall be charged with all expenditures for preliminary surveys, plans, investigations, etc., made for the purpose of determining the feasibility of utility projects under contemplation. If construction results, this account shall be credited and the appropriate utility plant account charged. If the work is abandoned, the charge shall be made to account 426, Miscellaneous Income Deductions, or to the appropriate operating expense account.

In addition, while the Commission has stated a preference for relying upon the NARUC USOA, the Consumer Advocate notes that the Federal Energy Regulatory Commission ("FERC") USOA also offers similar guidance for its Account 183. The description for the FERC Account 183 includes a section A. that is identical to the NARUC version, but it also includes a section B. that indicates the following:

B. This account shall also include costs of studies and analyses mandated by regulatory bodies related to plant in service. If construction results from such studies, this account shall be credited and the appropriate utility plant account charged with an equitable portion of such study costs directly attributable to new construction. The portion of such study costs not attributable to new construction or the entire cost if construction does not result shall be charged to account 182.2, Unrecovered Plant and Regulatory Costs, or the appropriate operating

See, Response to CA-IR-21a., where the Company states, "the Company does not utilize NARUC account 183" and goes on to indicate that it has its own policy, which the Company contends is consistent with NARUC accounting guidelines.

expense account. The costs of such studies relative to plant under construction shall be included directly in account 107, Construction Work in Progress-Electric.

If the Commission were to strictly follow the guidance offered by the NARUC or FERC USOA, the proposed recovery period for any authorized level of costs at issue would generally be tied to the recovery of the plant expenditures (when the project is completed).

As already discussed, with the Energy Agreement, there is already an agreement that the cost of implementation studies would be recoverable through the Clean Energy Infrastructure Program surcharge.¹² Thus, while both NARUC and FERC guidance with respect to these costs may be instructional, the Commission should also take note of the expectation created by the Energy Agreement with respect to cost recovery. The Energy Agreement does not, however, reflect an agreement regarding the appropriate period over which such costs may be recoverable.

One of the underlying concepts of the surcharge was to provide the HECO Companies a mechanism through which more timely recovery of actual costs could be initiated, but it was not meant to be a financing vehicle. That is, if certain costs were authorized to be recovered but did not justify a general rate proceeding, those costs could be recoverable through the surcharge until the next rate proceeding, when the costs would be included as part of the calculation of revenue requirements. In Docket No. 2008-0083, however, the parties agreed that the studies' costs could be

The Clean Energy Infrastructure Program surcharge was first introduced as the Renewable Energy Infrastructure Program surcharge in Docket No. 2007-0008. The concept of this surcharge was later further developed and authorized as part of Docket No. 2007-0416. The need for further clarification and how the surcharge might be used is also the subject of Docket No. 2010-0139, which is still open.

recoverable through the surcharge once actual costs had been reviewed and determined to be reasonable.

In the Docket No. 2009-0162 Application, the Company sought to recover the studies' costs over a three year period and the Company's response to CA-IR-1 does not address why the recovery period should be even shorter than was proposed in Docket No. 2009-0162. Instead, the Consumer Advocate recommends that the Commission should use a longer recovery period to reduce the impact on ratepayers' bills as well as reflect a more reasonable period over which to allow cost recovery to match the nature of costs. The Consumer Advocate offers that a recovery period of six years reflects a better balance of the impact on customers' bills and the costs that have been incurred. It would also allow some flexibility with respect to the Commission's decision whether the costs would be recovered through a surcharge, or, if through base rates, six years would represent two general rate case filing cycles. 13 If HECO's proposed recovery period is used, HECO offers that the impact on a residential customer that uses 600 kWh will approximate \$0.34 per month. 4 Using a six-year recovery period will reduce that impact by about one-sixth. Regardless of whether the Commission decides to allow cost recovery through the REIS or through base rates, the Consumer Advocate contends that the appropriate recovery period should be longer than 12 months.

Based on the agreement in Docket No. 2008-0274, the HECO Companies should be filing a general rate case application once every three years. Thus, recovery of the studies' costs over six years would span two rate case filings.

As shown on Exhibit 23, using the estimated surcharge of \$0.0567 per kWh and an estimated 600 kWh usage per month by a residential customer, the bill impact is \$0.34 (0.0567 X 600).

C. WHAT IS THE TOTAL ESTIMATED COST OF "BIG WIND?"

At this time, HECO's best estimate for the total cost of the "Big Wind" project was calculated for the levelized cost of energy ("LCOE") associated with the project. The LCOE values were provided in Exhibit 21 of Docket No. 2009-0162 and in response to CA-IR-15, which is summarized below:

Cost Component	Assumptions	Assumed LCOE (cents/kWh)
Levelized cost of Oahu Transmission and Distribution ("T&D") infrastructure to connect to submarine cable	 \$142 million Based on 1,480 GWh of delivered wind energy HECO owned and financed South Shore landing with substation and underground circuits 	1.11
Levelized cost of submarine cable system	 \$816 million \$101.7 million per year revenue requirement based on 1,480 GWh of devliered wind energy O&M expense – 2.1% of capital Financing terms: Debt to equity – 80/20 ratio Debt – 5% 20 years Nominal return on equity – 20% 	6.87
Levelized cost of wind energy	\$22.8 million per year revenue requirement	15.0
Total levelized cost of project	 \$340 million per year revenue requirement based on 1,480 GWh wind delivered Assuming Oahu infrastructure, wind energy and submarine cable at costs listed above. 	23.0

Even if proponents may disagree, however, the Consumer Advocate contends that fairly significant caveats must be attached to this estimate. As discussed earlier, the estimated costs for the project are being offered without the benefit of any firm

quotes or estimates from vendors. Furthermore, as discussed above, the Consumer Advocate contends that it is reasonable to expect that additional costs may be incurred to address various community concerns, including the costs associated with a community benefits package and that, unless those costs are not going to be recovered from ratepayers, a complete analysis of the impact on ratepayers should also include those estimates as well.

To some large degree, however, the total estimated costs of the Big Wind projects at this time, should have a somewhat moderate impact on the determination in this proceeding. As explained earlier, the Stage 1 Studies were instrumental to the determination of the feasibility of the interisland connection and the ability of HECO's system to accommodate the interconnection of large wind farms on neighbor islands. With an understanding that the consolidated HECO Companies will need much more than all of the known projects currently being negotiated and considered, including the Big Wind projects, to meet Hawaii's goal of 40% of electricity sales, the need to assess the feasibility of the Big Wind projects was necessary. If the Big Wind projects were not technically and theoretically feasible, the estimated costs for the Big Wind projects, whether the most or least cost-effective, would be moot.

At any rate, the Consumer Advocate contends that, while there are remaining uncertainties as to the reliability of the (current) estimate for the costs associated with the Big Wind projects, the costs associated with the Stage 1 Studies can be deemed recoverable.

D. IS BIG WIND, IN COMPARISON WITH OTHER INCREMENTAL ALTERNATIVES (I.E., BEYOND APPROVED ALTERNATIVES INCLUDING RESIDENTIAL PV, LARGE-SCALE PV, BIOMASS, BIOFUELED GENERATION, CONCENTRATED SOLAR, OAHU WIND GENERATION, AND/OR OCEAN THERMAL ENERGY CONVERSION), A REASONABLE AND COST-COMPETITIVE RENEWABLE ENERGY RESOURCE COMPONENT TO MEETING THE STATE'S RPS GOALS?

In answering this question, it is important to recognize that Big Wind by itself does not appear to be an alternative to the other alternative renewable energy resources (i.e., residential PV, large-scale PV, biomass, biofueled generation, concentrated solar, Oahu wind generation and/or ocean thermal energy conversion) for purposes of meeting the State's RPS goals, rather Big Wind may be part of a future set of renewable energy resources that would allow the HECO Companies to meet such a goal. The State RPS goals set forth in HRS § 269-92(a) state, in relevant part, that each electric utility selling electricity for consumption in the State shall establish a RPS of:

- (1) Fifteen per cent (15%) of its net electricity sales by December 31, 2015;
- (2) Twenty-five (25%) per cent of its net electricity sales by December 31, 2020; and
- (3) Forty per cent (40%) of its net electricity sales by December 31, 2030.¹⁵

On Table A2, in response to CA-IR-18, the RPS percentages were calculated considering different scenarios of renewable energy penetration (i.e., high, moderate, low) and sales forecasts (i.e., high, base, low), which is reproduced below:

¹⁵ HRS § 269-92(a) (Supp. 2010).

	2015	2020	2030
Base Sales			
High RE	19.7%	40.2%	49.6%
Moderate RE	17.6%	23.6%	29.7%
Low RE	14.0%	16.6%	20.0%
Moderate Sales			
High RE	17.4%	33.0%	32.5%
Moderate RE	15.5%	19.4%	19.4%
Low RE	12.3%	13.6%	13.1%
Low Sales			
High RE	22.4%	49.2%	67.2%
Moderate RE	19.9%	28.8%	40.2%
Low RE	15.8%	20.3%	27.2%
State RPS Goals	15%	20%	40%

Based on the above, only three scenarios are anticipated to meet the State's RPS goals for 2015, 2020, and 2030. It is important to note that two of the scenarios are associated with the High RE or high renewable energy penetration. As shown on Table A9 of the response to CA-IR-18, the High RE scenario include projections for various renewable energy resources as: PV, biomass, wind, waste to energy, OTEC, geothermal, and biofuel, from varying resources which include the Feed-in tariff, Big Wind.

It must be recognized that the scenario analyses performed are speculative and should not be viewed as fixed or "set in stone." There are considerable uncertainties associated with the assumptions in these analyses that cannot be reasonably predicted or anticipated at this time. Such factors that contribute to these uncertainties are:

 The development and continued participation of energy efficiency programs, demand response, or residential distributed generation, such as PV systems, and the impact of those efforts on lowering electric sales;

- The development and continued participation of electrical vehicles and the impact of the additional demand by these vehicles on increasing electric sales;
- The development and completion of renewable energy resource projects,
 etc.; and
- Other general factors that might affect the sales of electricity, such as the weather and the strength of the economy.

The actual impacts of these factors on the utility company and on the calculated RPS percentages may cause significant variances that cannot be reasonably predicted at this time.

HECO also provided levelized prices of Commission-approved purchase power agreements and FIT rates as shown on Table 1 in response to CA-IR-17. In comparing those rates with estimated LCOE of the "Big Wind" project (i.e., \$230/MWh), the "Big Wind" project is within the range of Commission-approved renewable energy rates.

Lastly, HECO conducted a cost comparison of various scenarios, including Big Wind and other renewable energy alternatives to Big Wind, such as high PV, high biofuel use, and mixed PV and biofuel use. The results of the cost comparison are summarized below:

Scenario	Year 2020 Total Annual Cost Calculation (\$ millions)	Year 2030 Total Annual Cost Calculation (\$ millions)
Big Wind	336-337	524-599
High PV	426	617-661
High Biofuels	467-612	655-844
Mixed PV/Biofuels	460-572	648-796

Based on the above, it appears that Big Wind projects are, based on only the projected costs for the projects and not considering the estimated ancillary costs associated with the Big Wind projects, the most feasible option as compared to several other alternatives. That being said, it is important to recognize that in conducting its cost analyses, HECO acknowledged that "there is no single renewable energy resource capable of providing a "silver bullet" hedge against oil price volatility. As a result, meeting Hawaii's aggressive renewable portfolio standards ("RPS") will require the addition of multiple and significant renewable energy resources into the Hawaiian Electric Companies' systems." 16

That being said, however, the Consumer Advocate does not accept any proposal that would support a plan that any and all renewable energy projects should be accepted at any cost in order to meet the RPS. Instead, the Consumer Advocate strongly recommends that a course of action should reflect projects grouped into different categories and that the projects that appear to be most cost-effective and likely to be completed in a timely fashion should be focused upon in the near-term. The less cost-effective and/or less likely to be completed on a timely basis would continue to be evaluated, but on a "back-burner" basis. This would allow the attention to be properly placed on the projects that will have the best bang for the buck now, especially when Hawaii's economy is still struggling and the ratepayers are faced with increasing costs spanning all categories, including utility services. Further, by placing less cost-effective and/or controversial projects on the back-burner, additional developments such as technology breakthroughs to increase cost-effectiveness or more coordinated efforts to

^{16 2009-0162} Application, Exhibit 21, at 1.

address community concerns beforehand (to reduce legal costs, AFUDC, etc.), the ratepayers' interests and wallets would be better served. This discussion again highlights the need for a forum that would allow such consideration to be conducted, such as the IRP process, to help develop such a path. The process would allow all interested stakeholders to obtain a better sense of the total number of projects that will be necessary to meet the RPS and how to best balance that against other important ratemaking considerations, such as affordability and reliability of utility service.

Thus, as discussed above, it is important to remember that at this time, the issue at hand is the cost recovery of the Big Wind Implementation Studies, rather than opining on the reasonableness of moving forward on the Big Wind project. Based on the above, it appears that it was prudent and reasonable to study the Big Wind project in light of the other renewable energy resources especially noting that there is not "one" resource that will meet the State's RPS goals.

III. <u>RECOMMENDATION</u>.

Based upon the above, the Consumer Advocate hereby states that it does not object to the Commission's approval of:

- Cost recovery of the Big Wind Stage 1 Studies in the amount of \$3,911,923; and
- Cost recovery through the REIS, but it should be over a period that is greater than 12 months.

Assuming that the Commission is inclined to allow the recovery of the costs, regardless of whether that recovery is through a surcharge or base rates, it should be

made clear that authorization to recover the costs associated with the Stage 1 Studies is not, in any form, approval of any part of the visualized Big Wind projects or the costs associated with those projects. The approval of the Big Wind projects and the recovery of the associated costs should be the subject of another proceeding(s). Furthermore, before any other resources are committed to other studies associated with the Big Wind projects, other future phases of the Big Wind projects, or any other significant projects that might represent a significant commitment of utility and/or ratepayer monies, HECO should, consistent with Commission expectations, first obtain approval to incur and defer the costs.

DATED: Honolulu, Hawaii, December 9, 2011.

Respectfully submitted,

(A JEFFREY T. ONO Executive Director

DIVISION OF CONSUMER ADVOCACY

CERTIFICATE OF SERVICE

ADVOCACY'S STATEMENT OF POSITION was duly served upon the following parties, by personal service, hand delivery, and/or U.S. mail, postage prepaid, and properly addressed pursuant to HAR § 6-61-21(d).

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DATED: Honolulu, Hawaii, December 9, 2011.